

**Montana Board of Oil and Gas Conservation  
Environmental Assessment**

**Operator:** J. Burns Brown Operating Company  
**Well Name/Number:** Gilmore 7-35-18  
**Location:** SE SW Section 7 T35N R18E  
**County:** Blaine, **MT;** **Field (or Wildcat)** W/C

**Air Quality**

(possible concerns)

Long drilling time: No, 3 to 4 days drilling time.

Unusually deep drilling (high horsepower rig): No, single derrick drilling rig to drill to 1450' TD.

Possible H2S gas production: None expected, objective formation, Eagle is sweet gas producers in this area.

In/near Class I air quality area: No, Class I air quality area.

Air quality permit for flaring/venting (if productive): Yes, DEQ air quality permit required under 75-2-211.

Mitigation:

- ☒ Air quality permit (AQB review)
- ☐ Gas plants/pipelines available for sour gas
- ☐ Special equipment/procedures requirements
- ☐ Other: \_\_\_\_\_

Comments: No special concerns – using small rig to drill to 1450' TD.

**Water Quality**

(possible concerns)

Salt/oil based mud: No, freshwater and freshwater mud system.

High water table: No high water table expected.

Surface drainage leads to live water: No, closest drainage is an Hay Coulee, an ephemeral tributary drainage to Lodge Creek, about 3/8 of a mile to the southeast from this location.

Water well contamination: No, closest water well is a stockwater well about 3/8 of a mile to the southwest from this location. Depth of this stock water well is 80'.

Porous/permeable soils: No, silty sandy bentonitic soils.

Class I stream drainage: No, Class I stream drainages in the area of review.

Mitigation:

- ☐ Lined reserve pit
- ☒ Adequate surface casing
- ☐ Berms/dykes, re-routed drainage
- ☐ Closed mud system
- ☐ Off-site disposal of solids/liquids (in approved facility)
- ☐ Other: \_\_\_\_\_

Comments: 150' of surface casing cemented to surface adequate to protect freshwater zones. Production casing if run will be cemented to surface. Also, fresh water mud systems to be used to drill surface hole and main hole.

**Soils/Vegetation/Land Use**

(possible concerns)

Stream crossings: None to be crossed.

High erosion potential: No, small cut, up to 3.5' and small fill, up to 2.0', required.

Loss of soil productivity: No, location will be restored after drilling, if nonproductive. If productive unused portion of drillsite will be reclaimed.

Unusually large wellsite: No, 250'X250' location size required.

Damage to improvements: Slight, surface use grassland.

Conflict with existing land use/values: Slight.

Mitigation

☐ Avoid improvements (topographic tolerance)

☐ Exception location requested

☒ Stockpile topsoil

☐ Stream Crossing Permit (other agency review)

☒ Reclaim unused part of wellsite if productive

☐ Special construction methods to enhance reclamation

☒ Other: Requires DEQ General Permit for Storm Water Discharge Associated with Construction Activity, under ARM 17.30.1102(28).

Comments: Access will be along existing county road, Norweigain Road and existing section line and ranch trails. About 1000' of new access road will be built into this location. Drilling fluids will be hauled to a nearby stock pond for sealant with surface owner approval. Cuttings will be left to dry in the earthen pits. Pits will be closed when dry. No special concerns.

### Health Hazards/Noise

(possible concerns)

Proximity to public facilities/residences: No residences within 1 mile of this location in any direction.

Possibility of H2S: None expected.

Size of rig/length of drilling time: Small drilling rig/short 3 to 4 days drilling time.

Mitigation:

☒ Proper BOP equipment

☐ Topographic sound barriers

☐ H2S contingency and/or evacuation plan

☐ Special equipment/procedures requirements

☐ Other: \_\_\_\_\_

Comments: Sufficient surface casing and operational BOP should mitigate any problems. No concerns.

### Wildlife/recreation

(possible concerns)

Proximity to sensitive wildlife areas (DFWP identified): None identified.

Proximity to recreation sites: None identified

Creation of new access to wildlife habitat: No

Conflict with game range/refuge management: No

Threatened or endangered Species: Threatened or endanger species listed are the Pallid Sturgeon and the Black footed Ferret. Proposed specie is the Greater Sage Grouse and the Sprague's Pipit. NH Tracker website lists twelve (12) species of concern: Swift Fox, Baird's Sparrow, Sprague's Pipit, Golden Eagle, Great Blue Heron, Burrowing Owl, Ferruginous Hawk, Chestnut Collared Longspur, Greater Sage Grouse, Logger-headed Shrike, Long-billed Curlew and McCown's Longspur

Mitigation:

- ☐ Avoidance (topographic tolerance/exception)
- ☐ Other agency review (DFWP, federal agencies, DSL)
- ☐ Screening/fencing of pits, drillsite
- ☐ Other: \_\_\_\_\_

Comments: Private sagebrush prairie surface lands. No concerns.

### **Historical/Cultural/Paleontological**

(possible concerns)

Proximity to known sites: None identified.

Mitigation

- ☐ avoidance (topographic tolerance, location exception)
- ☐ other agency review (SHPO, DSL, federal agencies)
- ☐ Other: \_\_\_\_\_

Comments: On private grassland. There maybe species of concern that maybe impacted by this wellsite. We ask the operator to consult with the surface owner as to what he would like done, if a species of concern is discovered at this location. The Board of Oil & Gas has no jurisdiction over private surface lands.

### **Social/Economic**

(possible concerns)

- ☐ Substantial effect on tax base
- ☐ Create demand for new governmental services
- ☐ Population increase or relocation

Comments: On private grassland. There maybe possible historical/cultural/paleontological sites that maybe impacted by this wellsite. We ask the operator to consult with the surface owner as to his desires to preserve these sites or not, if they are found during construction of the wellsite. The Board of Oil & Gas has no jurisdiction over private surface lands.

### **Remarks or Special Concerns for this site**

Well is a 1450' Eagle Formation test. No special concerns.

### **Summary: Evaluation of Impacts and Cumulative effects**

No long term impacts expected. Some short term impacts will occur.

I conclude that the approval of the subject Notice of Intent to Drill (does/**does not**) constitute a major action of state government significantly affecting the quality of the human environment, and (does/**does not**) require the preparation of an environmental impact statement.

Prepared by (BOGC): /s/Steven Sasaki

(title:) Chief Field Inspector

Date: September 26, 2011

Other Persons Contacted:

\_\_\_\_\_

Montana Bureau of Mines and Geology, GWIC website

\_\_\_\_\_  
(Name and Agency)

Blaine County water wells

\_\_\_\_\_  
(subject discussed)

September 26, 2011

\_\_\_\_\_  
(date)

US Fish and Wildlife, Region 6 website

\_\_\_\_\_  
(Name and Agency)

ENDANGERED, THREATENED, PROPOSED AND CANDIDATE SPECIES MONTANA  
COUNTIES, Blaine County

\_\_\_\_\_  
(subject discussed)

September 26, 2011

\_\_\_\_\_  
(date)

Montana Natural Heritage Program Website (FWP)

\_\_\_\_\_  
(Name and Agency)

Heritage State Rank= S1, S2, S3, T35N R18E

\_\_\_\_\_  
(subject discussed)

September 26, 2011

\_\_\_\_\_  
(date)

If location was inspected before permit approval:

Inspection date: \_\_\_\_\_

Inspector: \_\_\_\_\_

Others present during inspection: \_\_\_\_\_